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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------|--------------------------------|----------------------|---------------------|------------------|
| 10/552,337 | 07/21/2006 | Laurence C. Chow | 010118.00049 | 1875 |
| 22908 BANNER & W | 7590 10/08/200 ITCOFF, LTD. | EXAMINER | | |
| TEN SOUTH V | VACKER DRIVE | | GITOMER, RALPH J | |
| SUITE 3000 CHICAGO, IL 60606 | | | ART UNIT | PAPER NUMBER |
| | | | 1657 | |
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| | | | 10/08/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | |
|---|---|--|--|--|
| | 10/552,337 | CHOW ET AL. | | |
| Office Action Summary | Examiner | Art Unit | | |
| | Ralph Gitomer | 1657 | | |
| The MAILING DATE of this communication ap Period for Reply | ppears on the cover sheet with the | correspondence address | | |
| A SHORTENED STATUTORY PERIOD FOR REPUBLICHEVER IS LONGER, FROM THE MAILING IF Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory perior. Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNICATION I.136(a). In no event, however, may a reply be divided will apply and will expire SIX (6) MONTHS froute, cause the application to become ABANDON | DN. timely filed m the mailing date of this communication. IED (35 U.S.C. § 133). | | |
| Status | | | | |
| Responsive to communication(s) filed on 21. 2a) This action is FINAL . 2b) Th 3) Since this application is in condition for allow closed in accordance with the practice under | is action is non-final. ance except for formal matters, p | | | |
| Disposition of Claims | | | | |
| 4) Claim(s) 1-24 is/are pending in the applicatio 4a) Of the above claim(s) 7-25 is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) 1-6 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/ Application Papers 9) The specification is objected to by the Examir 10) The drawing(s) filed on is/are: a) accompany and applicant may not request that any objection to the Replacement drawing sheet(s) including the corre | wn from consideration. /or election requirement. ner. ccepted or b) □ objected to by the e drawing(s) be held in abeyance. S | ee 37 CFR 1.85(a). | | |
| 11) The oath or declaration is objected to by the E | | • | | |
| Priority under 35 U.S.C. § 119 | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summa Paper No(s)/Mail 5) Notice of Informal 6) Other: | | | |

Art Unit: 1657

Applicant's election without traverse of Group I, claims 1-6, in the reply filed on 7/21/08 is acknowledged. Please inform the examiner of any related cases, abandoned, pending, or allowed. And please inform the examiner as to how this case differs from the parent application so as to determine the proper priority date. Priority is granted to the filing date of this application only at this time, 7/21/06.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-4,6 are rejected under 35 U.S.C. 102(a) as being anticipated by Chow.

Chow has the same inventive entity as the present application with a priority date of 1/24/2001. Chow (7,294,187) entitled "Rapid Hardening Calcium Phosphate Cement Compositions" teaches in column 1 last paragraph, TTCP and DCPA powder and glycerol cements have been used. In column 7 lines 53-60, additives include gelling agents. In column 11 Table 3 shows a number of permutations of components of the cements including lactic acid and glycerol. Other acids include phosphoric acid, nitric, and hydrochloric.

All the features of the claims are taught by Chow for the same function as claimed.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chow. See the teachings of Chow above.

Claim 5 differs from Chow in that it does not recite the same carboxylic acids as claimed.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include any of the presently claimed carboxylic acids in the composition of Chow who teaches lactic acid because other similar acids such as citric and malic acid would be expected to have similar desirable characteristics such as lack of toxicity. No criticality is shown for selecting any of the claimed carboxylic acids.

Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for certain carboxylic acids, does not reasonably provide enablement for "an organic acid". The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

In claim the terms "an organic acid" lack enablement as it would require one of ordinary skill in this art undue experimentation to determine which such acid would work in the instant invention.

The entire scope of the claims has not been enabled because:

- 1. Quantity of experimentation necessary would be undue because of the large proportion of inoperative compounds claimed.
- 2. Amount of direction or guidance presented is insufficient to predict which substances encompassed by the claims would work.
- 3. Presence of working examples are only for specific substances and extension to other compounds has not been specifically taught or suggested.
- 4. The nature of the invention is complex and unpredictable.
- 5. State of the prior art indicates that most related substances are not effective for the claimed functions.
- 6. Level of predictability of the art is very unpredictable.
- 7. Breadth of the claims encompasses an innumerable number of compounds.
- 8. The level of one of ordinary skill in this art is variable.

In re Wands, 858 F.2d 731, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988)

The title of the invention is not descriptive where none of the terms are found in the claims. A new title is required that is clearly indicative of the invention to which the claims are directed.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chow (2002/0137812, 6,793,725) teaches cements without acid.

Xu (7,018,460) teaches cements.

Dalal (6,949,251) teaches cements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ralph Gitomer whose telephone number is (571) 272-0916. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber can be reached on (571) 272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/552,337 Page 6

Art Unit: 1657

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ralph Gitomer/ Primary Examiner, Art Unit 1657

Ralph Gitomer Primary Examiner Art Unit 1657